AOSE ADVISORY COMMITTEE

MEETING MINUTES:

May 22, 2006

On May 22, 2006, the AOSE Advisory Committee held a meeting in the Fifth Floor conference room of the Office of Environmental Health Services, 109 Governor Street, Richmond, Virginia 23219. The following committee members attended in person or via polycom:

- Chip Dunn, P.E., AOSE
- Wayne Fenton, Well Driller
- David Fridley, VDH Employee
- Andre Fontaine, P.E., Real Estate Agent;
- Dan Horne, Virginia Department of Health, Virginia Beach Health District
- Curtis H. Moore, AOSE, CPSS;
- Stuart McKenzie, local government
- Pam Pruett, AOSE;
- David Waldrep, Virginia Department of Health, Piedmont Health District;
- Dwayne Roadcap, Facilitator, VDH-Division of Onsite Sewage & Water Services; and
- Allen Knapp, Facilitator, VDH-Division of Onsite Sewage & Water Services.

The following committee members were not present:

- Ken Addison, surveyor
- Ray Wilson, contractor
- Frances Wright, contractor
- John Burleson, Virginia Department of Health, Central Shenandoah Health District;
- Neal Spiers, AOSE, CPSS;
- Phil Dunn, AOSE;

Handouts for the meeting included the following:

- 1. Meeting agenda;
- 2. Future Discussion Topics (updated 03/09/06);

Committee Purpose: The Advisory Committee makes recommendations to the Commissioner of Health on policy, procedures, and regulations for the Authorized Onsite Soil Evaluator (AOSE) program. The committee's discussion and recommendations are only limited by what the Committee wishes to address. Committee members and stakeholders may attend meetings via remote locations through the health department's video-conferencing system.

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Committee Decisions: The committee reaches all decisions using a "full-consensus" mechanism, meaning that all members in attendance must agree before a recommendation is sent to the Commissioner. Members who do not attend a meeting are expected to support their fellow members on decisions reached in their absence.

Ground rules:

- 1. Respect all views and welcome new ideas.
- 2. Participate, be candid, and avoid personal attacks.
- 3. Be respectful when you have the floor. Keep comments pithy and concise. Limit speaking time to assure that all members have an opportunity to be heard.
- 4. Listen for new understandings and offer new perspectives.
- 5. Focus on agenda and topic. Assist facilitator and chairperson in keeping the discussion focused and on topic.
- 6. Avoid "side bar" conversations and hidden criticism.

The Committee will seek non-committee input on an as-needed basis. The facilitator or chair person may recognize a non-member. Depending on the flow of discussion and the topic, the chair person could allow non-committee participants to interject without being recognized on a case-by-case basis. David Fridley, David Waldrep, Curtis Moore, Phil Dunn, Pam Pruitt, Neal Spiers, and Frances Wright agreed to act as chair persons for the Committee on a rotating schedule.

Dwayne Roadcap stated that John Burleson had withdrawn from the committee because he was leaving his position with the local health department. Dwayne noted that he would look into finding a replacement for him and would hope fill the position within the next few months.

Committee Discussion and Recommendations:

Agenda Topic #1: Update on prior recommendations:

- A. Sign, stamp, & seal
- B. Processing of one bare application per lot
- C. Investigate change in fee structure
- D. Addressing district inconsistencies

The Commissioner of Health approved the committee's prior recommendation to change the AOSE implementation manual (GMP #126), investigate ways to change agency fees and limit how many evaluations the health department will perform on any lot. Dwayne stated that he had been working on incorporating the committee's recommendation into GMP #126 since the Commissioner's approval. The committee's recommendation included a new cover page as well as changes to how AOSEs must sign, stamp, and seal their work. The cover page should help septic contractors to more easily assure that they

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have the proper paperwork. Adding the cover page will also help stakeholders to more quickly identify whether they have all of the permit's associated information. Dwayne had received several comments regarding the proposed changes to the AOSE implementation manual and the addition of a cover page. One person had suggested that VDH use only one certification statement for both the AOSE and PE to sign. One person thought the suggested changes required redundant information in the AOSE packet. Some suggested that the use of the phrase "master document" in the changes was confusing. Dwayne stated that he would make additional edits to GMP #126 and submit them for a final review by the committee at the next meeting (scheduled for July 13, 2006).

One member of the committee asked about the possibility to have two signatures (AOSE and PE) with one certification statement. This person stated that he had seen certification letters developed by an AOSE which conflicted with the design produced by the professional engineer when a construction permit was requested. In other words, the AOSE might suggest an installation depth of 12-inches with use of a proprietary, preengineered system (like Puraflo) for the certification letter approval and then the PE would design an Ecoflo with a 15-inch installation for the construction permit. Another member stated that the PE should be required to personally talk with the AOSE before the design was submitted for approval to assure that such conflicts were avoided. An AOSE would not "sign off" on the PE's design if he thought the PE's design had gone too far given the site and soil evaluation. The PE and AOSe could not work in a void and without adequate communication, conflicts would result. Another person stated that AOSEs did not have easy access to engineers and the reverse could be true too. Another member stated that PEs should not use 10 year old soil work because philosophy and understanding of the soils changed over time. A new evaluation was needed. Another members stated that the reverse situation was also true: PEs did not always agree with the AOSE's design recommendations from the abbreviated design. One PE on the committee noted a story where VDH had issued a certification letter for a property but the PE was not willing to design any system on the property given the site and soil conditions there. The PE did not agree that any system, much less the system proposed by the AOSE in the abbreviated design for the certification letter, could be expected to work given the site and soil conditions.

The committee then discussed what the definition of "consulting" meant? AOSEs could not engage in the practice of engineering but what happens when the AOSE proposes through a certification letter an installation depth of 54-inches and then the PE wants to put a shallow-placed mound on the site. If you are required to consult as PE, then the PE should not be reading a letter from the client. Instead the PE should "consult" by contacting the AOSE. One member noted that when a PE applied his professional seal that he was explicitly stating that he had exercised complete direction and control over the work. No regulant shall affix a seal which has prepared been by an unlicensed person unless under the direct supervision of the regulant. Section 750 of the APSCELIDIA regs. This member stated that this would include the AOSE's soil work from a certification letter.

Another member stated that you could not adequately correlate estimated percolation rates to loading rates. The mound design manual describes loading rates, not percolation rates and he knew that some PEs were designing mounds using percolation rates that were estimated by the AOSE. How could a PE design a mound using estimated percolation rates without consulting with the AOSE since loading rates were different from percolation rates? If there were sufficient paperwork, then maybe a phone call from the PE to the AOSE would be enough, or perhaps an email. But if the certification letter and supporting work were lacking, then the PE need to do more. The person strongly suggested that neither PEs nor AOSEs could take insufficient work from another consultant or the health department and then design something that was adequate without doing more than reading the paperwork.

One member suggested that the PE must "submit a statement indicating that he consulted with a specific AOSE, giving both the name and certification number of the AOSE. Have recommendation that the AOSE sign off on the PE's work. Another member suggested that VDH needed to develop a clear guideline on this issue, perhaps through a MOA with DPOR. After discussing these proposals, the committee did not develop any specific recommendation.

Dealing with inconsistencies:

Dwayne stated that the Division of Onsite Sewage and Water Services (DOSWS) was prepared to address inconsistencies that were brought to its attention in writing. Depending on the issue and inconsistency, the inconsistency could be addressed via a frequently asked question (FAQ) or edit to prior guidance. What DOSWS wanted to avoid was the situation where you were interpreting a reg via policy and then interpreting a policy with a FAQ and then clarifying the FAQ with more written follow-up. Eventually, you would pass a point of having too much information and an inability to quickly find the answer to the question sought. The primary goal of the response would be to identify why the inconsistency exists and to address the problem from a root cause perspective. Simply answering questions and clarifying paragraphs on a specific issue would not prevent the inconsistencies from continuing. Any long-term effort would best be spent on focusing why inconsistencies exist and preventing the inconsistency rather on answering questions that did not prevent inconsistencies.

One member asked what would happen to the specific question regarding the inconsistency and how would the two new environmental health coordinators assist with this program. As an example, this person noted that Hanover Health District (now called Chickahominy) requires a PE for an ATU treatment device followed by a conventional drainfield. The system would not be installed shallow or time-dosed. Health districts around Virginia Beach do not require a PE when an ATU is placed in front of a conventional drainfield. Who's correct? GMP #125 does not answer this question.

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One member noted that a lot these issues could be considered "unsolvable problems." One person noted that one inconsistency dealt with drip dispersal. Some AOSEs and PEs have been designing drip systems using a pad, some were using 2-foot center-to-center spacing and others were using 3-foot spacing. A staff person from DOSWS sent an email out to the health districts that said until we figure this out, use 3-foot spacing. He said that a lot of people wrote back and many do not agree with it. Problems and inconsistencies were not clearly black and white issues even though they may appear to be.

Another inconsistency brought up dealt with the practice of engineering. Everyone seems to have an opinion on what is and what is not the practice of engineering. One could not answer that type of complaint in 10 minutes or a few paragraphs. The issues were too complex. Other issues, however, might be simple and could be answered. For example, what is the separation distance from the bottom of a Puraflo system and a restriction? This issue could be addressed by a FAQ section or by revisiting the Puraflo approval. This person noted that the question was relatively simple. Presumably, someone has to do research on the issue by search prior FAQs to make sure of the answer and to verify that the question has not been asked and answered in the past. The consequences are relatively small when you write to one person on a specific situation. However, when you are writing a response to all stakeholders on that same simple issue, mistakes are more pronounced.

Another member suggested the idea of taking a list of questions once per year on a list of common issues. Respond by mass email or through a web-interface. Another person noted that the committee had already been down this discussion path and a lot of stuff is already answered but people are lazy and they won't go looking for the answer. Everyone wants an easy answer. Is there a way to make the GMP list searchable so that questions are not repeated or answered multiple times? If I had a question about, "depth to watertable", I would like to do a search on every GMP with that phrase. Another person stated that there were two mental models: (1) Problem is easy, tell us what the answer is; and (2) Problem is not easy, what can we do to make things better.

Dwayne stated that he would include in the meeting minutes the process for addressing inconsistencies. Below is a proposed outline of the process:

1. A professional organization (VOWRA, VAPSS, VEHA, etc.) or member of the AOSE advisory board submit a written request to the AOSE Advisory board in care of Dwayne Roadcap, 109 Governor Street, 5th Floor, Richmond, VA 23219. The written request would state the specifics of the inconsistency observed, where and when the inconsistency was observed, and ask that the committee review the issue.

- 2. DOSWS will review and investigate the inconsistency to examine why the inconsistency exists. If an answer to the question exists, then develop response.
- 3. The AOSE Advisory board will discuss DOSWS's evaluation of the issue, suggest courses of action or make recommendations to the Commissioner based on the findings.

Question #7 from the List of Future Discussion Topics: Availabity of AOSEs.

A member stated that he believed some owners and septic contractor were not having the same AOSE who designed the system to inspect it. Maybe the owner or contractor did not like what the AOSE charged or simply preferred that another AOSE do the inspection. The member cited Section 70.D of the AOSE regulations, which stated that the AOSE had to inspect the system unless he was unavailable. In this situation, the AOSE was available but the contractor or owner hired someone else to do the inspection. This person thought that any AOSE who inspects a system that was designed by another AOSE should be required to check with the designer before doing the inspection. Liability was a primary issue for the person who designed the system. If he designed it, then he should be the person to do the inspection. The conclusion from the March meeting was to put on a statement on the inspection form to require AOSE who inspect the work of other AOSEs to acknowledge that the designer was not available. One member noted that he does mandatory pre-construction conferences to assure that the system is installed properly. Everyone thought a pre-construction conference was a best practice method.

In the Virginia Beach area, one member noted that some AOSEs, according to septic contractors, were difficult to reach so that hire another AOSE for the inspection. In a way, this method provided another checks and balance to the system. AOSEs who find problems with another AOSE's work had to report it to VDH as part of their ethical responsibilities. One person noted that the rule developed from concerns by stakeholders in Southwest Virginia where AOSEs covered a large area. The availability clause in the AOSE regs were to have the health department do the inspection. VDH staff on the committee disagreed with this analysis and stated that VDH staff do not inspect systems that are designed by AOSEs. If an AOSE could not submit a completion statement, then the owner would need a variance.

Another member noted that AOSEs leave firms and when they do, who would be responsible for that inspection: the AOSE who designed it or the firm that he left? If an AOSE were working for another firm, they may not be able to do the inspection. VDH members on the committee noted that from a public health perspective, it did not matter which qualified person inspects the system. The committee ultimately decided that they were discussing best practice issues. Since equally qualified people were doing the inspection, then public health was not affected.

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Nevertheless, most of the committee preferred to have a statement on the AOSE inspection form that the inspecting AOSE had confirmed that the designing AOSE was not available. The intent of the regulation was to assure that AOSEs inspect the things they have designed. If inspection statement had such a clause, the inspector would assume the liability. One person asked for a check-off box that said: "AOSE ____ was not available". The owner and not the inspecting AOSE would make that decision. Another person thought that such an explicit statement was just a means to gig the AOSE—there was no need for such a statement. Ultimately, the owner would decide who inspected the system because the owner could fire AOSE and say he is unavailable.

After this discussion, the committee voted on a change the AOSE implementation manual to add a statement on the AOSE inspection form that the owner requested this inspection because the designing AOSE was not able to conduct the inspection. For those specific situations where the person who designed the system is not available, the inspecting AOSE shall include a statement. Andre Fontaine objected stating that such a requirement would make it more difficult for the land-owner to timely get things done for their needs. He stated that a lot other professional groups, including PEs, do not practice in this manner and that it was not an industry standard. He stated that there seemed like a lot of mistrust between the regulator and the regulated. Everyone needed to take a step back and remember that we all depend on each other as professionals. He did not hear these kinds of disagreements among PEs. On the issue of "who's responsible", he thought that it was like digging footers. Someone could have literally destroyed the site and it not be known to the final inspector. The same issue applies when PE signs off on an inspection from an AOSE report, but at least the PE had opportunity to walk out at the design site.

Another person asked what would happen when if he designed an outlet filter and it was not installed. Most agreed that a level of trust in the industry was needed. For liability, most voiced the opinion that the AOSE who inspected the system would accept equal or more responsibility if the system did fail.

Some thought such a rule would be written out of mistrust, which would not be a good practice. What is the current reality of those working in the private sector? The owner has the freedom to hire a different AOSE and the health department isn't going to question the owner to decide the details. One described the issue as a self-policing problem. If an AOSE designed a system and he's convinced of collusion between a contractor and another AOSE, then he could sue somebody or he could file a complaint with the regulating authority. If an AOSE files an inaccurate completion statement, then VDH can take enforcement action.

Most members agreed that every change you allow from the original inspection, then the more liability you are accumulating as an inspector of the system. How does the change affect the design? If it won't affect the design, one AOSE member said that he probably will let it go. If an AOSE says the installation was in "substantial compliance" with the plans, then he would have more liability.

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Future Discussion Topics: Paperwork Issues

Question #8: One member stated that you can't change formal plans without prior approval and that the permit becomes null & void if conditions change. Another person suggested that septic contractors will learn which AOSEs will approve design changes that comply with the regulations even though the design required a higher and more expensive component. He will learn that he can change things to provide a lower bid than other contractors because he knows that there is one particular AOSE who will make the change. Ultimately, can the AOSE say that the design complies with the regulations? After discussion, the committee thought this was another item on a "Best Practice" manual, which VOWRA was working on. The best practice is don't deviate from the design.

There are two levels of inspections: systems that meet the design and those that meet the regulations but not the standard of the design. If an AOSE deviated from the design, he should not do that unless the design did not comply with the regulations. Are the AOSEs going to accept equivalent designs? If the design does not specify, "or equivalent", then you should not change it. Maybe I want triple wash gravel. This issue could go into best practice manual that VOWRA is working on.

Question #4: Two valid permits and contractor only receives one. Is there a way to notify the owner that there are two valid permits. ID#s do not change in some districts, the issue date is what changes. This is an installer issue. How does HD void the first permit? This is a communication problem between the owner and the installer. HD should have a void letter to send to the owner. Who do you send it to? HD voids original permit, issues second, and notify parties. The AOSE regulations require you to file a new application. HD would collect new application. Need best practice manual for HD on the issue of issuing two permits for the same property.

Questions #5 and #6: VDH staff believed that permits staff issue are proportional, triangulated, and easily verifiable. Some staff draw their permits to-scale, others do not. For tank locations, side-line utility easements, contractors tell some AOSEs that they love to-scale drawings. Fenton stated that he liked scaled drawings but sometimes he cannot find corner markers to pull from. Nevertheless, contractors thought that it was much easier to have both (triangulation and to-scale). For large acreage, it is difficult to do a to-scale site plan on 8.5 x 11-inch paper. All drawings by VDH are proportional with written measurements. One VDH member noted that some PEs produce drawings with no tied down measurements. When you look at the scale provided, you cannot get an accurate measurement to the system component because it is some decimal part of the scale. The scale has very little use and measurements are needed. A scaled drawing does not mean that you have to show property lines. You can show trees and rocks and show to-scale and that is of little use.

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Page 6.B.3 of the AOSE policy shows that the standard submittal is located on a plat by survey, ie., surveying the perimeter and showing that survey on plat. Some members noted that the private sector must have survey plat but the health department can waive that requirement. For rural areas, it is common to have unsurveyed properties. Owners file bare applications so VDH competes in a subsidized manner because they can evaluate the property without a plat. If a survey plat is required for all applications accepted by VDH, then the problem is solved. Should we let AOSEs waive the survey plat just like we do for VDH staff? Would AOSEs allow that option even if VDH gave it to them? Counties in far Southwest Virginia have a lot property that is not surveyed. Locust tree on the corner is named as a corner. In Piedmont areas, recorded plat with survey plat is the standard. How do you issue permit without knowledge of the property, many persons asked.

The committee again thought that many of these paperwork issues were issues for best practice and professional excellence. VDH should formalize the application process for the survey waiver and give the same option to AOSEs. Most members thought the waiver for a survey should be limited to applications for construction permits and not certification letters. In Northern Virginia, all property is surveyed. Members were concerned that VDH might set a standard where people would abandon certification letters altogether.

AOSE Advisory Committee

Agenda for May 22, 2006 Meeting

See Attachment #1 of Future Discussion Topics.

9:00 AM - 9:15 AM: Review January 17, 2006 minutes

Actions: Modify and/or approve minutes

Notice of Committee Membership Change (John Burleson)

9:15 AM – 10:30 AM: Update on prior recommendations:

E. Sign, stamp, & seal

F. Processing of one bare application per lot

G. Investigate change in fee structure

H. Addressing district inconsistencies

10:30 AM – Noon: AOSE Topic Discussion (To Be Determined):

Noon – 12:30 PM: Working lunch. Continue discussions:

12:30 PM – 2:00 PM: Continue discussions

2:00 PM: Meeting Adjourned.

Next meeting dates are as follows: 7/13/2006; 9/14/06; and 11/9/06.

Please contact Dwayne Roadcap at (804) 864-7462 with other ideas for discussion at this meeting. Primary meeting location in the OEHS conference room, 5th Floor, 109 Governor Street. Video-conferencing via local health departments provided with advance scheduling.

Attachment #1 for May 22, 2006 Meeting

Future Discussion Topics

AOSE Advisory Committee

Note: Yellow Highlights indicate that Committee has discussed the item

Process Issues

1. Why are different health districts implementing the AOSE policy and regulations differently?¹

- 2. Can VDH require AOSE work on sites previously approved where the owner wants to change things (ie. Changes in house location, well location, number of bedrooms, etc.)?²
- 3. To what extent should VDH help AOSE/PEs research files for proposed drainfields and wells on neighboring properties? How can this need be better coordinated?²
- 4. Can deemed approval apply to proprietary, pre-engineered systems without a change to the law?²
- 5. Can VDH apply "deemed approval" to all AOSE/PE work or work that a PE uses with a VDH certification letter to help speed up the process for owners?³
- 6. Should VDH and AOSE/PEs be required to field stake their proposed well and drainfield locations?⁴
- 7. Can VDH provide more consistency as to when it requires formal plans from a PE on alternative systems? 4
- 8. Should VDH perform site evaluations and be in the design business? Should VDH focus its resources on plan review, being a record keeper, developing reports on system function, O&M, QA/QC, and perhaps do site evaluations "as means of last resort"? 4
- 9. Should VDH discuss waivers from secondary effluent or pressure dosing with owners who submit repair applications with supporting AOSE/PE work? VDH staff do not generally interfere in the design consultation between client and AOSE, but VDH staff do not know whether the AOSE discussed the option for a waiver with the client, or for that matter, the myriad other design options available when treatment and pressure dosing are used. 4
- 10. How can OEHS improve its communication of statewide policies to AOSE/PEs?

 OEHS seems to create additional process through electronic communication without adequate notice to all stakeholders. 4

¹ Discussed at 7/12/05 meeting. No recommendation reached.

² Discussed at 8/9/05 meeting. Recommendation in meeting minutes.

³ Discussed at 11/10/05 meeting. No recommendation reached.

⁴ Discussed at 1/17/06 meeting. No recommendation reached.

⁵ Discussed at the 5/22/06 meeting. No recommendation reached.

Paperwork Issues

- 1. Does AOSE have to stamp every page?¹
- 2. What is the minimum quality of work expected? (handwritten vs. type, to-scale drawing, showing only the "good" borings, field staking the footprint, field staking the well area, etc.)
- 3. How can we develop standardized forms as listed in the implementation manual?
- 4. How can VDH improve its letters of approval to assure that contractors know the exact location of the property and where to install the system? Health departments use different dates for their letters of approval and it is confusing when compared to the AOSE package, which often has different dates. Sometimes there are multiple letters of approval for different sized houses.⁵
- 5. Should VDH require its staff (especially AOSEs) to produce the same paperwork that is expected of AOSEs working in the private sector (i.e., scaled drawings, stamp & seal every page, page numbering, etc.)? ⁵
- 6. VDH does not require a survey plat for its work but AOSE/PEs must have it. VDH requires AOSE/PE to survey locate their work for certification letters but does not require it for their work. AOSE/PEs must show their work to scale but health department staff can "triangulate" their measurements. How can VDH stop the double standard? ⁵
- 7. If an AOSE is available to inspect his design, why can a contractor or owner hire a different AOSE to do the inspection? It is best practice to have the AOSE/PE that designed the system to inspect it, if possible.⁵
- 8. If an AOSE requires more stringent construction (say Sch. 40 instead of corrugated pipe for the header line) and another AOSE inspects the system, does the inspecting AOSE have to approve the installation even if the contractor did not install the system as specified by the design AOSE? ⁵

Installer Issues

- 1. How can installers (well drillers and septic contractors) better coordinate inspections with the private sector?
- 2. How does the installer know that the permit it receives from the owner/AOSE is the correct permit?
- 3. How can stakeholders limit garages, sheds, outbuildings, swimming pools, etc. from encroaching into the proposed footprint before a system is installed?
- 4. How can stakeholders better communicate when a permit change is needed and the contractor is on-site to do the work?

- 5. Can VDH or AOSEs inform the installers at the time of inspection whether the system's construction passes? Often, people leave without giving an answer and the installer is left there with people and equipment.
- 6. Well drillers often receive different looking permit packages from AOSEs. Some paperwork has measurements shown, others are shown "to-scale", some do not include a cover page, others simply have a drawing. Should AOSE permit packages be more uniform to assist the installer?
- 7. Should an AOSE be required to field stake by survey their well locations when conventional means of measuring is impossible? Well drillers find permits with scaled drawings but you cannot measure to the well site without a surveyor.

Inspection Issues

- 1. Why is an "as-built" drawing needed if the system is installed just as shown on the construction permit?
- 2. Should AOSEs fill out a different inspection form? Currently, they do not need to list the exact components installed.
- 3. How can VDH assure equal treatment in the review of AOSE work from varying districts and counties? Currently, AOSE work and their package designs must meet different standards in varying counties and health districts.
- 4. Should a contractor be able to hire an inspector for their job? Is there a conflict of interest in an AOSE accepting money from a contractor for their inspection? Many AOSEs are including inspection notices in their packages, including charges based upon lead-time notification, which the contractor seems to pay.
- 5. Should AOSEs be required to perform safe, adequate, and proper (SAP) inspections under Title 32.1-165 of the Code of Virginia? Although it may be that private sector AOSE's have no obligation to accept all service requests, nonetheless, as members of a state enforced monopoly, as a group, should there be some obligation to provide the full range of services for which they are authorized?

Rule/Policy/Reg Issues

- 1. What is the practice of engineering? Can AOSE design duplex or small commercial facilities?
- 2. How can fees charged be changed or addressed? (Local vs. state)
- 3. How to get consistency across health district lines?
- 4. How can customers be better informed of the AOSE/PE requirements for alternative systems? Often, contractors are left holding the bag to explain system components and O&M.
- 5. Should VDH be more involved with O&M agreements for alternative systems?

Training & Testing Issues

- 1. What are the training needs for AOSE/PEs and VDH employees?
- 2. Can VDH begin to offer more training courses for alternative systems, inspections, etc?
- 3. Can VDH create an AOSE-in-Training category for those areas of the states where there are too few AOSEs and pricing for the work is high? In Southwest VA, there are too few AOSEs for the work needed. Surveyors might be able to take some classwork for the soil training to enter such a category.
- 4. Should a suggested minimum standards of "good" practice document be created for AOSE work? This document would not have to be binding but would offer guidance to AOSEs and set the "standard" for what should be done.

Enforcement Issues

- 1. When should VDH take enforcement action against an AOSE?
- 2. What should the penalties be for submitting poor work to the health department?
- 3. How can VDH take quicker action when a problem is encountered with bad private sector work?